

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

1-36. (Cancelled)

37. (Currently Amended) An electrosurgical instrument having an end effector, the end effector configured to simultaneously provide radio frequency power and a fluid to treat tissue, the power sufficient to cause a dimensional change of the tissue, the end effector comprising:

at least one electrode to deliver the radio frequency power to the tissue;

at least one fluid outlet to deliver the fluid to the tissue;

a dimensional change sensor configured to grasp the tissue and move relative to [[the]] a dimensional change of the tissue while having a grasp of the tissue;

wherein the dimensional change sensor comprises a first clamp having a first jaw member and a second jaw member and a second clamp having a first jaw member and a second jaw member, the first and second jaw members of the first clamp being configured in an opposing manner to grasp tissue therebetween when the first and second jaws of the first clamp are moved together, and the first and second jaw members of the second clamp being configured in an opposing manner to grasp tissue therebetween when the first and second jaws of the second clamp are moved together; and

wherein the first jaw members of the first and second clamps are configured to move in correspondence with the dimensional change of the tissue, wherein the at least one electrode is disposed between either the first jaw members of the first and second clamps or the second jaw members of the first and second clamps to treat tissue grasped

by the jaw members of the first and second clamps such that the dimensional change in the tissue caused by such treatment will cause a corresponding change in the distance between the first jaw members of the first and second clamps at least one of the first clamp and the second clamp is movable relative to the other clamp.

38. (Cancelled)

39. (Previously Presented) The electrosurgical instrument of claim 37 wherein:

the dimensional change sensor is configured to provide feedback to vary the radio frequency power according to the dimensional change of the tissue.

40. (Previously Presented) The electrosurgical instrument of claim 37 wherein:

the dimensional change sensor is configured to provide feedback to treat the tissue to a predetermined dimensional change.

41. (Previously Presented) The electrosurgical instrument of claim 37 wherein:

the dimensional change sensor is configured to provide feedback to measure the dimensional change.

42. (Previously Presented) The electrosurgical instrument of claim 37 wherein:

the dimensional change sensor is operatively associated with a device to provide a measurement of the dimensional change.

43. (Previously Presented) The electrosurgical instrument of claim 37 wherein:

the dimensional change sensor is operatively associated with means to provide a measurement of the dimensional change.

44. (Previously Presented) The electrosurgical instrument of claim 37 wherein:

the dimensional change sensor comprises a contact sensor.

45. (Previously Presented) The electrosurgical instrument of claim 37 wherein:

the dimensional change sensor comprises a shrinkage sensor; and

the dimension change of the tissue comprises a shrinkage of the tissue.

46. (Previously Presented) The electrosurgical instrument of claim 45 wherein:

the shrinkage sensor is configured to move relative to the shrinkage of the tissue.

47. (Previously Presented) The electrosurgical instrument of claim 45 wherein:

the shrinkage sensor is configured to provide feedback to vary the radio frequency power according to the shrinkage of the tissue.

48. (Previously Presented) The electrosurgical instrument of claim 45 wherein:

the shrinkage sensor is configured to provide feedback to treat the tissue to a predetermined shrinkage.

49. (Previously Presented) The electrosurgical instrument of claim 45 wherein:

the shrinkage sensor is configured to provide feedback to measure the shrinkage.

50. (Previously Presented) The electrosurgical instrument of claim 45 wherein:

the shrinkage sensor is operatively associated with a device to provide a measurement of the shrinkage.

51. (Previously Presented) The electrosurgical instrument of claim 45 wherein:

the shrinkage sensor is operatively associated with means to provide a measurement of the shrinkage.

52. (Withdrawn) The electrosurgical instrument of claim 37 further comprising:

a monopolar electrosurgical instrument.

53. (Previously Presented) The electrosurgical instrument of claim 37 further comprising:

a bipolar electrosurgical instrument.

54. (Previously Presented) The electrosurgical instrument of claim 37 wherein:

the at least one fluid outlet is positioned to provide the fluid onto the at least one electrode.

55. (Previously Presented) The electrosurgical instrument of claim 37 wherein:

the at least one fluid outlet is at least partially defined by the at least one electrode.

56. (Previously Presented) The electrosurgical instrument of claim 37 wherein:

the at least one fluid outlet is at least partially defined by a hole in the at least one electrode.

57. (Previously Presented) The electrosurgical instrument of claim 37 wherein:

the at least one fluid outlet is configured to provide the fluid to wet the at least one electrode.

58. (Previously Presented) The electrosurgical instrument of claim 37 wherein:

the at least one electrode comprises a plurality of electrodes.

59. (Previously Presented) The electrosurgical instrument of claim 37 wherein:

the at least one fluid outlet comprises a plurality of fluid outlets.

60. (Previously Presented) The electrosurgical instrument of claim 37 wherein:

the at least one electrode comprises a first electrode and a second electrode; and
the at least one fluid outlet comprises a first fluid outlet and a second fluid outlet.

61. (Previously Presented) The electrosurgical instrument of claim 60
wherein:

the first fluid outlet is positioned to provide the fluid onto the first electrode; and
the second fluid outlet is positioned to provide the fluid onto the second electrode.

62. (Previously Presented) The electrosurgical instrument of claim 60
wherein:

the first fluid outlet is configured to provide the fluid to wet the first electrode;
and the second fluid outlet is configured to provide the fluid to wet the second electrode.

63-68. (Cancelled)

69. (Currently Amended) An electrosurgical instrument comprising:
at least one electrode;
a dimensional change sensor configured to grasp the tissue and move relative to
[[the]] a dimensional change of the tissue while having a grasp of the tissue;
wherein the dimensional change sensor comprises a first clamp having a first jaw
member and a second jaw member and a second clamp having a first jaw member and a
second jaw member, the first and second jaw members of the first clamp being
configured in an opposing manner to grasp tissue therebetween when the first and second
jaws of the first clamp are moved together, and the first and second jaw members of the
second clamp being configured in an opposing manner to grasp tissue therebetween
when the first and second jaws of the second clamp are moved together; and

wherein the first jaw members of the first and second clamps are configured to move in correspondence with the dimensional change of the tissue,
wherein the at least one electrode is disposed between either the first jaw members of the first and second clamps or the second jaw members of the first and second clamps to treat tissue grasped by the jaw members of the first and second clamps such that the dimensional change in the tissue caused by such treatment will cause a corresponding change in the distance between the first jaw members of the first and second clamps at least one of the first clamp and the second clamp is movable relative to the other clamp.

70. (New) The electrosurgical instrument of claim 69 further comprising:
at least one fluid outlet positioned to provide a fluid onto the at least one electrode.

71. (New) The electrosurgical instrument of claim 69 wherein:
a distance between the first and second jaw members of the first clamp is selectively adjustable to either increase or decrease a compressive force applied to the tissue being treated, and

a distance between the first and second jaw members of the second clamp is selectively adjustable to either increase or decrease a compressive force applied to the tissue being treated.

72. (New) The electrosurgical instrument of claim 69 wherein:
wherein the second jaw members of the first and second clamps are configured to move in correspondence with the dimensional change of the tissue, wherein the

dimensional change in the tissue will cause a corresponding change in the distance between the second jaw members of the first and second clamps.

73. (New) The electrosurgical instrument of claim 37 wherein:

wherein the second jaw members of the first and second clamps are configured to move in correspondence with the dimensional change of the tissue, wherein the dimensional change in the tissue will cause a corresponding change in the distance between the second jaw members of the first and second clamps.

74. (New) The electrosurgical instrument of claim 37 wherein:

a distance between the first and second jaw member of the first clamp is selectively adjustable to either increase or decrease a compressive force applied to the tissue being treated, and

a distance between the first and second jaw member of the second clamp is selectively adjustable to either increase or decrease a compressive force applied to the tissue being treated.